

General Instructions

This is an experiment in the economics of decision-making. The instructions are simple, and if you follow them carefully and make good decisions, you can earn a considerable amount of money that will be paid to you in cash at the end of the experiment. The experiment will be broken up into a series of auction periods in which you can bid for units of a good called X. Attached to these instructions, you will find a sheet labeled Record Sheet which you will use to record your decisions and earnings.

The currency used in these auctions is called “francs”. All bidding and earnings in the auction will be in terms of francs. Each franc is worth _____ dollars to you. That is, you will earn one dollar for every _____ francs you earn. At the end of the experiment, your francs will be converted to dollars at this rate, and you will be paid in dollars. Each buyer receives a cash balance of _____ francs at the beginning of the experiment that may be used to purchase units of X.

Each period, your computer screen displays your Resale Value for one unit of X. See figure 1. The screen indicates how many francs you would receive if you obtained the unit of X in the auction that period and could resell it to the experimenter. Your Resale Value is chosen randomly and is equally likely to be any whole number between 0 and 1000. Each of the numbers 0, 1, 2, ..., 998, 999, 1000 is equally likely to be drawn each period. You will receive a new randomly chosen Resale Value in each period. All other buyers also receive their own Resale Values. Since each buyer receives her/his own random Resale Value, your Resale Value will typically be different from those of other buyers. Other buyers' Resale Values are independent of your Resale Value. That is, each other buyer's Resale Value is still equally likely to be any whole number between 0 and 1000, no matter what yours happens to be. You will be able to obtain up to one unit of X in each period by participating in the auction process which will be described later in the instructions.

Each period you will be randomly paired with one other participant who may bid for the same unit of good X as you. **Since each buyer receives his/her own random Resale Value, your Resale Value will typically be different from that of the buyer with whom you are paired.** During each period you may submit a bid for one unit of the good using the computer (See figure 1). You may submit a bid by entering a number in the “My bid is” box, and then clicking on the “OK” button. The computer will compare your bid to the bid of the other participant who was randomly paired with you that period. If your bid is the higher of the two, you receive a unit of X. If your bid is the lower of the two, you do not receive a unit of X. If the bids are equal, each bidder has an equal chance of receiving the unit.

At the end of each period, you will record your earnings for this period in the appropriate column of your record sheet. Then you will compute your balance at the end of this period. Your balance is equal to your starting balance plus or minus your earnings for each period. Since each subject is guaranteed to earn 5 dollars, if your balance drops below _____ francs, you will receive 5 dollars and we will ask you to leave the experiment. Since we need an even number of participants, the computer will also select another buyer who will be asked to leave the experiment after receiving his or her current balance.

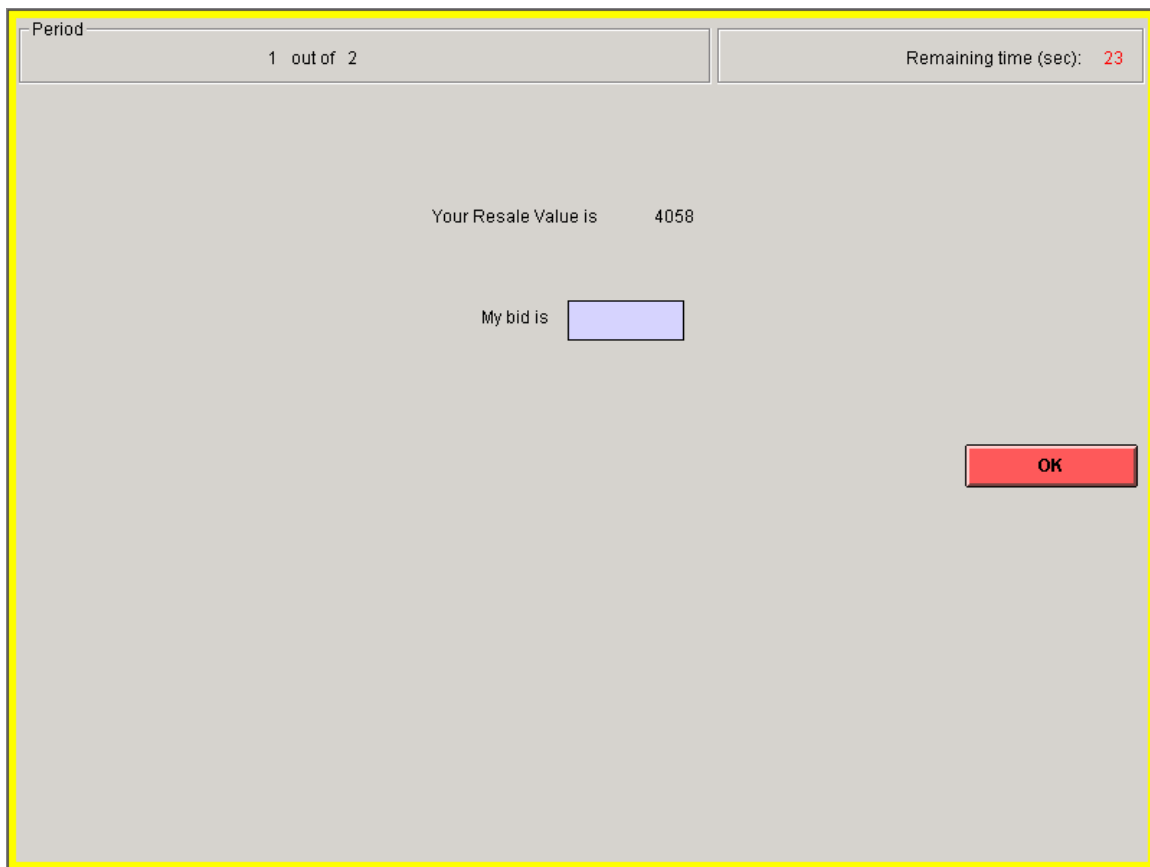


Figure 1

Periods 1 to 10

In each of the following 10 periods, earnings are computed in the following way. If you receive a unit of X, your earnings for this period equal:

Resale Value - Your Bid.

If you do not receive a unit of X, your earnings for this period equal:

- (Your Bid).

See figure 2 for the example screen.

Example 1: Suppose that your Resale Value in a certain period is 4058 and you submit a bid for 3179. Suppose your bid is the highest so that you receive the unit sold. Your earnings for this period will be equal to:

$$4058 - 3179 = 879.$$

Example 2: Suppose that your Resale Value in a certain period is 8470 and you submit a bid of 207. Suppose that your bid is the lowest so that you do not receive the unit sold. Your earnings for this period will be equal to:

- (207).

Period		1 out of 2		Remaining time (sec): 26	
Your Resale Value was	4058	Your Bid was	3179	The other participant's Bid was	207
Your earnings for this period are	879				
					<input type="button" value="OK"/>

Periods 11 to 20

After learning your Resale Value for the period, you will be able to decide whether or not to participate in the auction for that period. See figure 3 for the example screen.

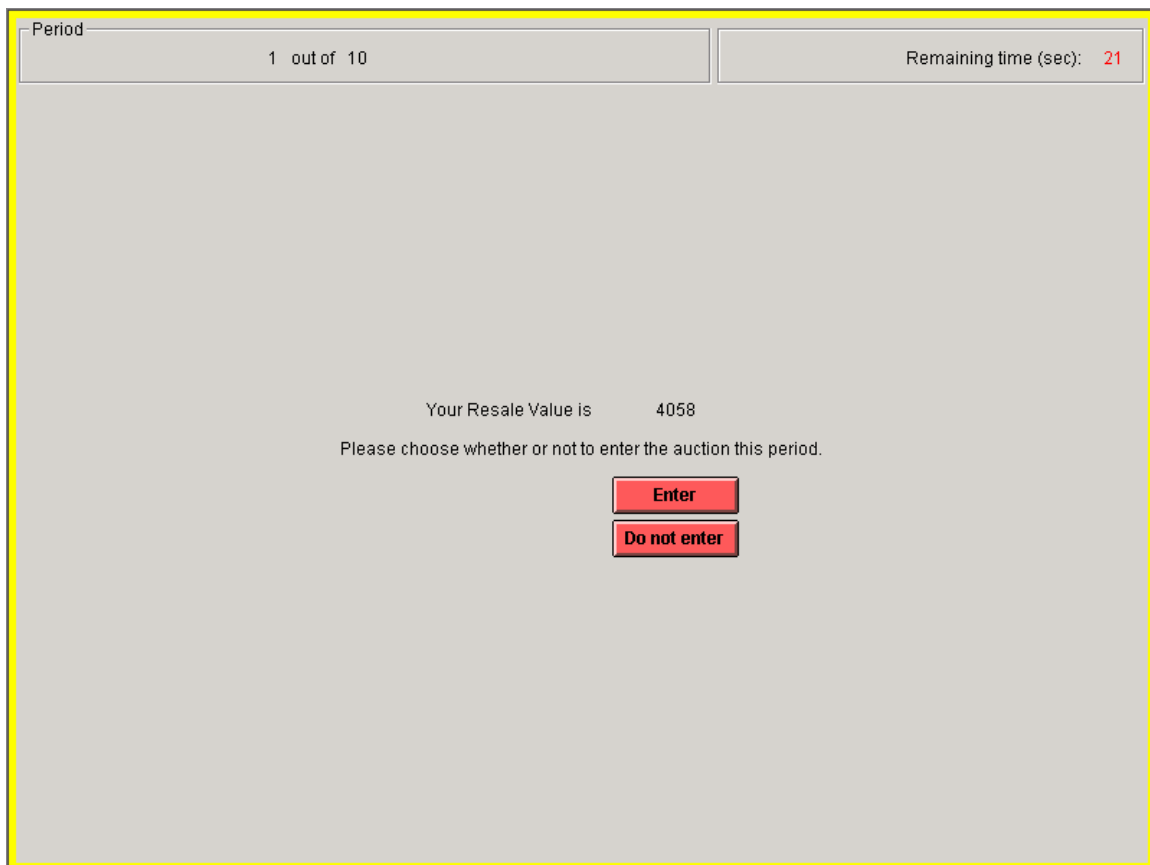
Between you and the participant who is randomly paired with you in a certain period, there are four possibilities.

If **both of you choose to enter the auction**, the process is carried out just as it was in periods 1-10.

You will not know if the other participant has entered the auction. So if **you choose to enter the auction and the other participant chooses not to enter the auction**, you will still make a bid. However, you will receive your Resale Value without having to pay your bid.

If **you choose not to enter the auction and the other participant does enter the auction**, you will receive 0 earnings for the period.

If **both of you choose not to enter the auction**, there is a one-half chance that you will receive your Resale Value as your earnings for the period. This is like receiving the unit but not having to pay for it. There is also a one-half chance that you will receive 0 earnings for the period. See figure 4 for the profit screen.



The screenshot shows a user interface for an auction period. At the top, there are two boxes: "Period 1 out of 10" and "Remaining time (sec): 21". The main area displays "Your Resale Value is 4058" and "Please choose whether or not to enter the auction this period." Below this text are two red buttons: "Enter" and "Do not enter".

Figure 3

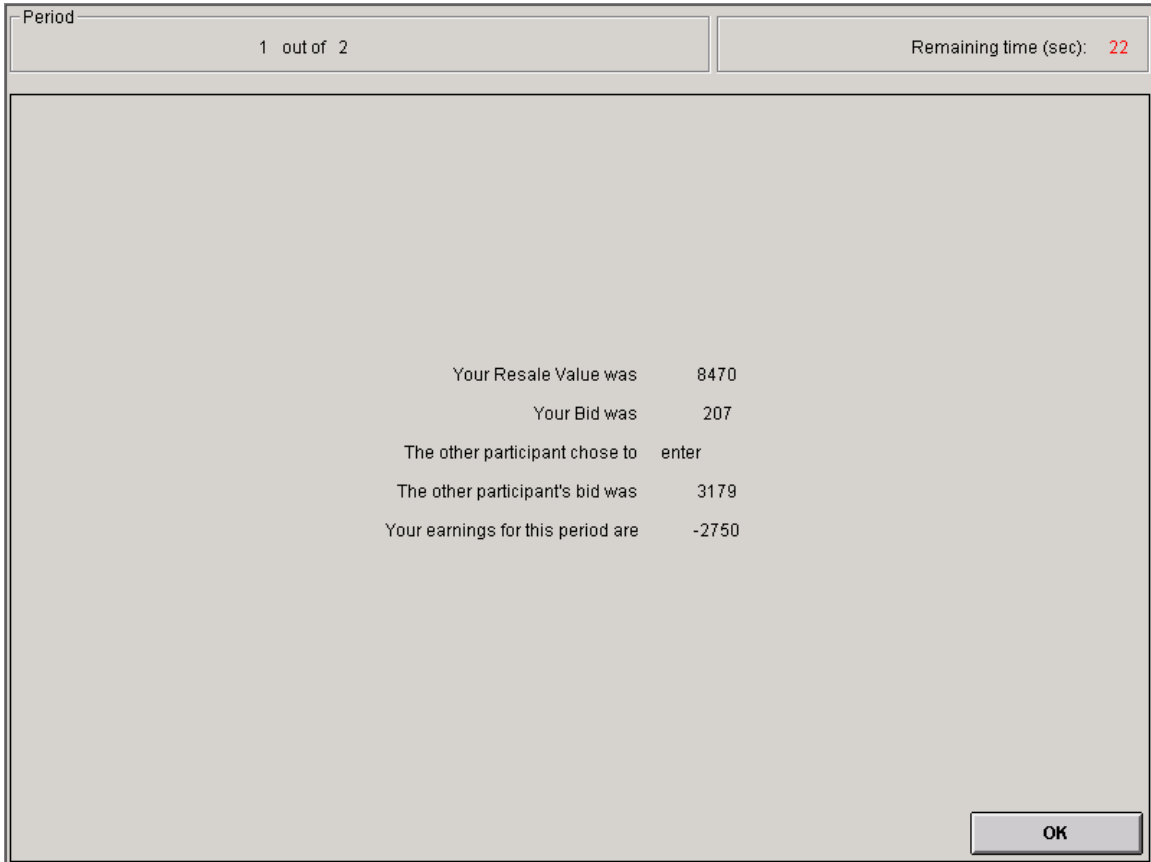


Figure 4

Periods 21 to 30

In each of the following 10 periods, earnings are computed in the following way. If you receive a unit of X, your earnings for this period equal:

$$\text{Resale Value} - (3/5) \times (\text{Your Bid})$$

If you do not receive a unit of X, your earnings for this period equal:

$$- \text{Your Bid} - (2/5) \times (\text{Other Participant's Bid})$$

Example 1: Suppose that your Resale Value in a certain period is 4058 and you submit a bid for 3179. Suppose your bid is the highest so that you receive the unit sold. Your earnings for this period will be equal to:

$$4058 - (3/5) \times 3179 = 4058 - 1907 = 2151.$$

Example 2: Suppose that your Resale Value in a certain period is 8470 and you submit a bid of 207. Suppose that the other participant's bid is 3179. Your bid is the lowest, so you do not receive the unit sold. Your earnings for this period will be equal to:

$$- 207 - (2/5) \times 3179 = -207 - 1272 = -1479.$$

Periods 31 to 40

After learning your Resale Value for the period, you will be able to decide whether or not to participate in the auction for that period. See figure 3 for the example screen.

Between you and the participant who is randomly paired with you in a certain period, there are four possibilities.

If **both of you choose to enter the auction**, the process is carried out just as it was in periods 21 to 30.

You will not know if the other participant has entered the auction. So if **you choose to enter the auction and the other participant chooses not to enter the auction**, you will still make a bid. However, you will receive your Resale Value without having to pay your bid.

If **you choose not to enter the auction and the other participant does enter the auction**, you will receive 0 earnings for the period.

If **both of you choose not to enter the auction**, there is a one-half chance that you will receive your Resale Value as your earnings for the period. This is like receiving the unit but not having to pay for it. There is also a one-half chance that you will receive 0 earnings for the period.